

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (canceled)

Claim 2 (currently amended): A method according to Claim ~~1~~, ~~characterized by~~ 21, and having a data-specific separation, which ~~manages particularly to overcome the~~ overcomes an air interface for the purpose of optimal use of ~~[[the]]~~ frequency resources and to obtain optimal transmission quality of ~~[[the]]~~ a specific application or ~~[[the]]~~ individual applications within a multimedia application.

Claim 3 (currently amended): A method according to claim ~~1~~, ~~characterized by having~~ 21, and reassembling the data stream that was separated according to data structure ~~re-assembled~~ after ~~[[the]]~~ optimized parallel transmission into the original data stream such that ~~[[the]]~~ optimization ~~process covered by this invention~~ is transparent to the user.

Claim 4 (canceled)

Claim 5 (currently amended): A method according to claim ~~[[1]]~~ 21, characterized by having a functional unit (CAC) on the user's side as well as a functional unit (ICAMU) on the side of the core network, which are designed in their protocol, conversion, and algorithm-specific components preferably as software modules for microprocessors or signal processors in such a way that an update of partial functions as needed or alternatively the complete function via the mobile radio communications network is possible, which thus allows for a permanent method for updating to new methods and protocols.

Claim 6 (currently amended): A method according to claim ~~1~~, ~~characterized by having~~ 21, and providing an optional connection between the network functional unit (ICAMU) and ~~[[the]]~~ a Customer Care and Billing System (CCBS) of the network operator for the billing of

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offered services and the creation and verification of ~~the use of the methods covered by the invention~~ use by a single user.

Claim 7 (currently amended): A method according to claim ~~[[1]]~~ 21, characterized by ~~having~~ causing the functional unit (CAC) on the user's side as well as the functional unit (ICAMU) on the side of the core network communicate with each other by means of ~~appropriate methods, preferably by~~ inband signaling, such that the needs of an optimized data transfer via various transmission channels between the ~~component~~ components are met.

Claim 8 (currently amended): A method according to claim ~~[[1]]~~ 21, characterized by ~~having~~ causing the functional unit (ICAMU) on the side of the core network to provide an additional service to the user by optional conversion of the data stream from the user into other standardized multimedia or protocol forms and to transmit them through alternative pathways as needed.

Claim 9 (currently amended): A method according to claim ~~[[1]]~~ 21, characterized by ~~having~~ causing at least the functional unit (ICAMU) on the side of the core network ~~optionally equipped~~ to handle appropriate routing and signaling mechanisms to transmit application or data structure specific parts of multimedia data streams via various transmission networks.

Claim 10 (currently amended): A method according to claim ~~1~~, ~~characterized by the fact that the method described by the invention~~ 21, wherein the method may be used in fixed network systems in like manner as needed.

Claim 11 (currently amended): A method according to claim ~~1~~, ~~characterized by the fact that the method described by the invention may be used by appropriate action on the part of~~ 21 and enabling the network provider ~~in allocating~~ to allocate channels for ~~[[the]]~~ dynamic load distribution and load optimization of ~~[[the]]~~ alternative transmission channels and/or ~~[[the]]~~ various networks.

Claim 12 (currently amended): A method according to claim ~~1~~, ~~characterized by the fact that the method described by the invention may be used by appropriate action on the part of the~~

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~~user (configuration menu or the like)~~ 21, and enabling the user to use the method for a customer-specific selection and choice method in ~~as many areas as possible, such as areas including~~ speed of transmission, services used, priorities, quality of ~~service, costs etc~~ service and costs.

Claim 13 (currently amended): A method according to claim 2, ~~characterized by having and re-assembling~~ the data stream that was separated according to data structure ~~re-assembled~~ after [[the]] optimized parallel transmission into the original data stream such that [[the]] optimization ~~process covered by this invention~~ is transparent to the user.

Claim 14 (canceled)

15 (currently amended): A method according to claim 2, characterized by having a functional unit (CAC) on the user's side as well as a function unit (ICAMU) on the side of the core network, which are designed in their protocol, conversion, and algorithm-specific components ~~preferably~~ as software modules for microprocessors or signal processors in such a way that an update of partial functions as needed or alternatively the complete function via the mobile radio communications network is possible, which thus allows for a permanent method for updating to new methods and protocols.

16 (currently amended): A method according to claim 3, characterized by having a functional unit (CAC) on the user's side as well as a function unit (ICAMU) on the side of the core network, which are designed in their protocol, conversion, and algorithm-specific components ~~preferably~~ as software modules for microprocessors or signal processors in such a way that an update of partial functions as needed or alternatively the complete function via the mobile radio communications network is possible, which thus allows for a permanent method for updating to new methods and protocols.

Claims 17-20 (canceled)

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Claim 21 (new): A method for the optimized transmission of multimedia services in a mobile communications network, particularly a mobile radio communications network, comprising the steps of:

providing a functional unit (CAC) on a user's side as well as a functional unit (ICAMU) on a core network side for handling a multimedia data stream,

recognizing, in the functional units and depending on the direction of the multimedia data stream, particular applications within the multimedia data stream by means of suitable parameters in form of indicators, descriptors, protocol variations, or, data analysis processes,

separating the recognized applications completely or in part by their specific data structure and generating several data streams,

transmitting the several data streams individually and in parallel by their specific data structure via available transmission channels of the mobile communications network which are optimized for respective needs of the individual data streams,

re-assembling the data streams on a receiver side,

optionally not aggregating completely some application-specific components of the data streams, and

further transmitting the non-aggregated components at least in part as a separate data stream within the mobile communications network or alternatively via various network accesses to other telecommunication or data networks to other receivers or the same receiver.